



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,724	08/09/2001	Yasuo Mori	862.C2330	3976

5514 7590 01/11/2005

FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

MENBERU, BENIYAM

ART UNIT PAPER NUMBER

2626

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/924,724

Applicant(s)

MORI ET AL.

Examiner

Beniyam Menberu

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-50 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>08/05/2003</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Specification***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description: On page 32, line 24, the reference characters 20MB and 20 CB are not in the drawings in Figure 4. On page 33, lines 1-2, reference character 20MR and 20CR are not shown in Figure 4. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The disclosure is objected to because of the following informalities:

On page 34, line 24, the term "TOP" should not be capitalized.

On page 42, line 2-3, the process should move to step 611 instead of 612.

On page 50, line 5, "such the" is not grammatically correct.

On page 51, reference 303 is referred to as page drawing file but previously 303 was referred to as spool file on page 50, line 12.

On page 52, line 7, previewer is referred to as 305 but in Figure 3 it is labeled 306.

On page 52, line 7, despooler is referred to as 303 but in Figure 3, it is labeled 305.

On page 52, lines 24-27, when there is no change in Figure 15 in step 1504 it should go directly to end but in the specification it mentions step 1505 on line 26.

The specification fails to describe the scenario when "NO" branch is taken in step 606 in Figure 6.

Appropriate correction is required.

### ***Claim Objections***

3. Claim 6 is objected to because of the following informalities:

On line 18, the word "presents" should be "present". Appropriate correction is required.

### ***Drawings***

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: reference 16 in Figure 1. Corrected drawing sheets, or amendment to the specification to add the reference character(s) in the description, are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so

as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 1, 2, 3, 4, 6, 10, 11, 12, 13, 14, 16, 20, 21, 22, 23, 24, 26, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6661530 to Munetomo et al in view of U.S. Patent No. 5923013 to Suzuki et al.

Regarding claims 1, 11, and 21, Munetomo et al disclose an information processing apparatus, method, and program (column 8, lines 5-15) that creates print data, comprising:

intermediate data converting means for converting print data created by an application to an intermediate code format and storing said converted intermediate code format data and processing conditions of said print data (column 9, lines 20-24, lines 31-32, lines 28-30);

preview display controlling means for displaying the print processing result in advance based on the print data created by said data creating means and processing

conditions (column 12, lines 45-51). However Munetomo et al does not disclose editing means, method, and program for editing the data stored and converted to an intermediate code format by said intermediate data converting means or processing conditions of said print data and data creating means for creating print data and processing conditions that implement print processing different from the print data created by said application based on the data edited by said editing means.

Suzuki et al disclose editing means, method, and program for editing the data stored and converted to an intermediate code format by said intermediate data converting means or processing conditions of said print data (column 5, lines 26-30) and data creating means for creating print data and processing conditions that implement print processing different from the print data created by said application based on the data edited by said editing means (column 9, lines 34-45).

Munetomo et al and Suzuki et al are combinable because they are in the similar problem area of print data processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the editing and data creating means taught by Suzuki et al with the print processing apparatus system taught by Munetomo et al to implement a flexible print data generation system.

The motivation to combine the reference is clear because it will be convenient to have a way of editing or changing print data before performing the printing.

Regarding claims 2, 12, and 22, Munetomo et al in view of Suzuki et al teach all the limitations of claims 1, 11, and 21 respectively. Further Suzuki et al discloses the

information processing apparatus, method, and program, wherein when a plurality of intermediate code format print data is stored, said editing means combines said plurality of intermediate code format print data into a single combined job (column 25, lines 27-29).

Regarding claims 3, 13, and 23, Munetomo et al in view of Suzuki et al teach all the limitations of claims 1, 11, and 21 respectively. Further Munetomo et al disclose the information processing apparatus, method, and program, wherein said preview display controlling means acquires layout information from said stored intermediate code format data and previews said print processing result based on said layout information (column 24, lines 39-46).

Regarding claims 4, 14, and 24, Munetomo et al in view of Suzuki et al teach all the limitations of claims 1, 11; and 21 respectively. Further Munetomo et al in view of Suzuki et al disclose the information processing apparatus, method, and program, wherein when a mirroring condition is specified for said stored intermediate code format data, said preview display controlling means makes it possible to preview the data in a mirrored display format based on the editing result from said editing means (Figure 62; column 29, lines 29-35).

Regarding claims 6, 16, and 26, Munetomo et al in view of Suzuki et al teach all the limitations of claims 1, 11, and 21 respectively. Further Suzuki et al disclose the information processing apparatus, method, and program, wherein when said editing means combines a plurality of jobs, said preview display controlling means makes it

possible to present a preview in a display format in which said combined job is displayed as a single job (column 16, lines 13-22; column 9, lines 46-56).

Regarding claims 10, 20, and 30, Munetomo et al in view of Suzuki et al teach all the limitations of claims 2, 12, and 22 respectively. Further Munetomo et al in view of Suzuki et al disclose the information processing apparatus, method, and program, wherein in the processing of combining the print data by said editing means, the stored data is identified based on identification information obtained by adding an ID to identify the stored data to the logical page ID of said stored data (column 4, lines 51-60).

7. Claims 5, 15, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6661530 to Munetomo et al in view of U.S. Patent No. 5923013 to Suzuki et al further in view of U.S. Patent No. 5864634 to Kurita.

Regarding claims 5, 15, and 25, Munetomo et al in view of Suzuki et al teach all the limitations of claims 1, 11, and 21 respectively. However Munetomo et al in view of Suzuki et al does not disclose the information processing apparatus, method, and program, wherein when color inversion is specified for said stored intermediate code format data, said preview display controlling means makes it possible to preview the data in a color-inverted display format based on the editing result from said editing means.

Kurita discloses an apparatus, method, and program wherein color inversion is specified for said stored intermediate code format data, said preview display controlling means makes it possible to preview the data in a color-inverted display format based on

the editing result from said editing means (column 6, lines 59-62, lines 66-67; column 7, lines 1-4, lines 8-13).

Munetomo et al, Suzuki et al, and Kurita are combinable because they are in the similar problem area of print data processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the color inversion taught by Kurita with the print data processing system of Munetomo et al in view of Suzuki et al to implement color inverted print preview system.

The motivation to combine the reference is clear because a user may prefer to print data using color inverted format so it would be convenient to have a preview of color inverted print data.

8. Claims 7, 17, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6661530 to Munetomo et al in view of U.S. Patent No. 5923013 to Suzuki et al further in view of U.S. Patent No. 6788427 to Okigami.

Regarding claims 7, 17, and 27, Munetomo et al in view of Suzuki et al teach all the limitations of claims 1, 11, and 21 respectively. However, Munetomo et al in view of Suzuki et al does not disclose the information processing apparatus, method and program comprising print data controlling means for judging whether the print data is created by said application or by said data creating means and controlling the output destination of the print data.

Okigami discloses a print data controlling means for judging whether the print data is created by said application or by said data creating means and controlling the

output destination of the print data (Okigami discloses a print data controller that compares new print data generated with print data spooled and determines the outputting of the new print data based on this comparison (column 6, lines 59-67; column 3, lines 31-41).

Munetomo et al, Suzuki et al, and Okigami are combinable because they are in the similar problem area of print data processing

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the print data discrimination system taught by Okigami with the print data processing system of Munetomo et al in view of Suzuki et al to implement an efficient printing system.

The motivation to combine the reference is clear because Okigami teaches that the print data controlling method can be used to determine if duplicate print request has been issued thus saving print processing time (column 2, lines 23-35).

9. Claims 8, 18, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6661530 to Munetomo et al in view of U.S. Patent No. 5923013 to Suzuki et al further in view of U.S. Patent No. 6804018 to Mochizuki.

Regarding claims 8, 18, and 28, Munetomo et al in view of Suzuki et al teach all the limitations of claims 1, 11, and 21 respectively. However Munetomo et al in view of Suzuki et al does not disclose the information processing apparatus, method, and program, wherein said print data controlling means releases the occupation of the application after said intermediate data converting means stores the converted data.

Mochizuki discloses information processing apparatus, method, and program, wherein said print data controlling means releases the occupation of the application after said intermediate data converting means stores the converted data (Mochizuki discloses a print system wherein the completion of print data conversion triggers a release of an application (column 9, lines 24-33). Since Munetomo et al in view of Suzuki et al disclose of storing converted data, the teachings of Mochizuki can be applied to release application after storing of converted data as taught by Munetomo et al in view of Suzuki et al.).

Munetomo et al, Suzuki et al, and Mochizuki are combinable because they are in the similar problem area of print data processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the application releasing method taught by Mochizuki with the print data processing system of Munetomo et al in view of Suzuki et al to implement an efficient print data processing system.

The motivation to combine the reference is clear because processing resources can be saved by releasing an application after print data processing is complete.

10. Claims 9, 19, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6661530 to Munetomo et al in view of U.S. Patent No. 5923013 to Suzuki et al further in view of U.S. Patent No. 5847848 to Suzuki et al.

Regarding claims 9, 19, and 29, Munetomo et al in view of Suzuki et al (U.S. Patent No. 5923013) teach all the limitations of claims 1, 11, and 21 respectively. Further Munetomo et al in view of Suzuki et al (U.S. Patent No. 5923013) disclose the

information processing apparatus, method, and program, wherein said intermediate code format data converted by said intermediate data converting means is data that can be edited in accordance with expansion, contraction, and layout display (Munetomo et al: column 28, lines 30-39; column 24, lines 39-46). However Munetomo et al in view of Suzuki et al (U.S. Patent No. 5923013) does not disclose editing in accordance with mirroring and color inversion.

Suzuki et al (U.S. Patent No. 5847848) disclose information processing apparatus, method, and program wherein editing in accordance to mirroring (column 6, lines 7-18) and color inversion (column 4, lines 5-23) is performed.

Munetomo et al, Suzuki et al (U.S. Patent No. 5923013), and Suzuki et al (U.S. Patent No. 5847848) are combinable because they are in the similar problem area of print data processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the mirroring and color inversion editing method taught by Suzuki et al (U.S. Patent No. 5847848) with the print data processing system of Munetomo et al in view of Suzuki et al (U.S. Patent No. 5923013) to implement a practical previewing system for printing.

The motivation to combine the reference is clear because mirroring and color inversion provides a user with more flexible printing options.

11. Claims 31, 36, 41, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6661530 to Munetomo et al in view of U.S. Patent No. 5847848 to Suzuki et al.

Regarding claims 31, 36, 41, and 46, Munetomo et al discloses an information processing apparatus, method, and program that creates print data, comprising: spooling means for storing print data created by an application (column 9, lines 20-24, lines 31-32, lines 28-30); determining means for determining whether inversion or mirroring is specified as the print setting for said print data (column 29, lines 10-20; column 29, lines 29-35); preview display controlling means for, when said determining means determines that inversion is specified, creating inverted display data based on the print data stored in said spooling means and presenting a preview (column 12, lines 45-51).

However Munetomo et al does not disclose information processing apparatus wherein inversion is color based.

Suzuki et al disclose an information processing apparatus, method and program wherein color inversion is specified as print setting (column 4, lines 5-23).

Munetomo et al and Suzuki et al are combinable because they are in the similar problem area of print data processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the color inversion taught by Suzuki et al with the print data processing system of Munetomo et al to implement color inverted previewing system.

The motivation to combine the reference is clear because a user may specify color inverted print data thus it is necessary to provide a print preview with color inversion.

12. Claims 32, 33, 37, 38, 42, 43, 47, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6661530 to Munetomo et al in view of U.S. Patent No. 5847848 to Suzuki et al further in view of U.S. Patent No. 6101513 to Shakib et al.

Regarding claims 32, 37, 42, and 47, Munetomo et al in view of Suzuki et al teach all the limitations of claims 31, 36, 41, and 46 respectively. However Munetomo et al in view of Suzuki et al does not disclose the information processing apparatus, method, and program according to claim 31, wherein when mirroring is specified as the print setting for said print data and a binding margin is also set, said preview display controlling means creates mirrored display data after adjusting the binding margin setting.

Shakib et al disclose an apparatus, method, and program wherein when mirroring is specified as the print setting for said print data and a binding margin is also set, said preview display controlling means creates mirrored display data after adjusting the binding margin setting (column 4, lines 39-41;column 16, lines 6-17).

Munetomo et al, Suzuki et al, and Shakib et al are combinable because they are in the similar problem area of print data processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the mirroring with binding margin adjustment taught by Shakib et al with the print data processing system of Munetomo et al in view of Suzuki et al to implement a flexible binding margin setting.

The motivation to combine the reference is clear because Shakib et al teaches that when duplex printing is set the margins have to be adjusted (column 16, lines 14-17).

Regarding claims 33, 38, 43, and 48, Munetomo et al in view of Suzuki et al teach all the limitations of claim 31, 36, 41, and 46 respectively. Further Shakib et al disclose the information processing apparatus, method, and program, further comprising binding margin determining means for determining whether the binding margin setting should be adjusted or not when mirroring is specified as the print setting for said print data and a binding margin is also set, wherein when said binding margin determining means determines that the binding margin setting should be adjusted, said preview display controlling means creates mirrored display data after adjusting the binding margin setting(column 4, lines 39-41;column 16, lines 6-17).

13. Claims 34, 35, 39, 40, 44, 45, 49, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6661530 to Munetomo et al in view of U.S. Patent No. 5847848 to Suzuki et al further in view of U.S. Patent No. 5995985 to Cai.

Regarding claims 34, 39, 44, and 49, Munetomo et al in view of Suzuki et al teach all the limitations of claims 31, 36, 41, and 46 respectively. However Munetomo et al in view of Suzuki et al does not disclose the information processing apparatus, method, and program, wherein when mirroring is specified as the print setting for said print data and a Nup setting for placing N logical pages on one physical page is made, said preview display controlling means creates mirrored display data after adjusting the Nup page order.

Cai discloses information processing apparatus, method, and program, wherein when mirroring is specified as the print setting for said print data (Figure 8; column 10, lines 1-5) and a Nup setting for placing N logical pages on one physical page is made (column 9, lines 63-65; column 10, lines 16-22), said preview display (column 5, lines 60-62) controlling means creates mirrored display data after adjusting the Nup page order (column 10, line 3-5, lines 55-58).

Munetomo et al, Suzuki et al, and Cai are combinable because they are in the similar problem area of print data processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the multiple-page and mirroring method taught by Cai with the print data processing system of Munetomo et al in view of Suzuki et al to implement a print system with multiple-page layout with mirroring option.

The motivation to combine the reference is clear because if a user required printing with multiple-page (Nup) and mirroring Cai provides for this print option with a preview capability.

Regarding claims 35, 40, 45, and 50, Munetomo et al in view of Suzuki et al teach all the limitations of claims 31, 36, 41, and 46 respectively. Further Cai discloses the information processing apparatus, method, and program, further comprising Nup page order determining means for determining whether the Nup page order should be adjusted or not when mirroring is specified as the print setting for said print data (column 10, line 3-5, lines 55-58) and a Nup setting for placing N logical pages on one physical page is made (column 9, lines 63-65; column 10, lines 16-22), wherein when

said Nup page order determining means determines that the Nup page order should be adjusted, said preview display controlling means creates mirrored display data after adjusting the Nup page order(column 10, line 3-5, lines 55-58).

### ***Other Prior Art Cited***

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6809833 to Blair et al disclose a raster image processor.

U.S. Patent No. 6285461 to Fujii et al disclose preview function for image output system.

U.S. Patent No. 6678066 to Nakamura discloses method for print controlling.

U.S. Patent No. 5802259 to Sugai discloses print data processor.

U.S. Patent No. 6671066 to Aikawa et al disclose print data processor.

U.S. Patent No. 6181436 to Kurachi disclose system and method for management of printing.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beniyam Menberu whose telephone number is (703) 306-3441. The examiner can normally be reached on 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on (703) 305-4863. The fax phone

Art Unit: 2626

number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (703) 306-5631. The group receptionist number for TC 2600 is (703) 305-4700.

**Patent Examiner**

Beniyam Menberu

BM

1/6/2005



**KIMBERLY WILLIAMS  
SUPERVISORY PATENT EXAMINER**